

### **IN THE SPECIFICATION**

Please amend the specification as follows:

Please amend the paragraph beginning on page 25, the line 6, as follows:

In this example embodiment, the instances of template S6 are not grouped to form a vector at this time even though the instances of template S6 have a common signal. If the second input to the latch (the non-clock input) of template S6 is from the same control bus, then the instances of template S6 would form a vector at this point. In this example ~~embodimen~~ embodiment, however, the instances of template S6 are grouped as a vector in the next step based on circuit connectivity which is described below.